

D6102-013

Work Order ID 163361

163361

Item ID: D3500-1

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Saddle

Start Date: 6/27/2017 Start Qty: 40.00

40

Cust Item ID:

Required Date: 7/6/2017 Req'd Qty: 40.00

40

Customer:

Reference:

Approvals:

Process Plan:

DAS
21
9-89

Date: JUN 27 2017

Tooling:

Date:

Run Start *NR1*

QC:

Date:

SPC (Y/N):

Date:

Stop *NR2*

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D3500

C

100

2.84

100

HAAS 1

HAAS CNC vertical machine #1

HAAS CNC VERTICAL MACHINING #1

Memo

10.19

Program Batch No. 163361 Double check by: PK 1-Machine Step No 1
per Folio FA641 and inspect per attached Dimension Sheets2-Machine Step
No 2 per Folio FA641 and inspect per attached Dimension Sheets3-Machine
Step No 3 per Folio FA641 and inspect p

41

4

S.C. 17/07/28
Kt 17-07-21

DAS
39
9-89

110

110

QC

Quality Control

QC1- Inspection performed by CMM

0.00

Memo

0.40

Inspect on CMM as per folio CMMA031.
DWG REV: C
CMM PROG. REV: AA

41

4

S.C. 17/07/28
Kt 17-07-21

DAS
39
9-89

120

120

QC

Quality Control

QC8- Inspect parts - second check

0.00

Memo

0.80

41

4

DAS
45
9-89
2017-8-2

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐								
Misidentified ☐	Past Due ☐								
OTHER : _____									

Work Order ID 163361

Tuesday, June 27, 2017 1:07:14 PM

163361

Page 2

Item ID: D3500-1 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Saddle
 Start Date: 6/27/2017 Start Qty: 40.00 ***40*** Cust Item ID:
 Required Date: 7/6/2017 Req'd Qty: 40.00 ***40*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 *130* HandFinish Hand Finishing	Chemical Conversion Coat per QSI005 4.1 Memo	0.00 2.23				(41)	Ø	2017-08-16	JSL BEB.
140 *140* Powdercoat Powder Coating	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum N 13804 Memo START TIME: 2:50 FINISH TIME: 5:20	0.00 1.23				41	Ø	17-08-23	3300
150 *150* QC Quality Control	QC3- Inspect Part Finish Memo	0.00 0.40				41			UAG 38 9-89 AUG 28 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐				
OTHER : ☐									

Work Order ID 163361

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163361

Page 3

Item ID: D3500-1 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Saddle
Start Date: 6/27/2017 Start Qty: 40.00 ***40*** Cust Item ID:
Required Date: 7/6/2017 Req'd Qty: 40.00 ***40*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160	Identify as per dwg & Stock Location: 51408	0.00							
160									
Packaging	Memo	0.40			DAS 6 9-89	41	AUG 29 2017		17/9/5
Packaging									
170	QC21- Final Inspection - Work Order Release	0.00							
170									
QC	Memo	4.00							
Quality Control									

DAS 21 9-89**AUG 29 2017**

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐								
Misidentified ☐	Past Due ☐								
		OTHER : _____							

Picklist Print

Tuesday, June 27, 2017 1:07:17 PM

Page 1

Work Order ID: 163361

163361

Parent Item: D3500-1

D3500-1

Parent Item Name: Saddle

Start Date: 6/27/2017

Required Date: 7/6/2017

Start Qty: 40.00

Required Qty: 40.00

Comments: IPP Rev:A New Issue 06-06-15 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D6102-013		Manufactured	No			100	Each	11.0000	1	40			
D6102-013									**				
Saddle Billet													

K 17-07-21

Location

Loc Qty

Loc Code

MAT046

11

160144

11

→ 163266

40 + 1

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval																																																									
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																																																									
Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____			
Misidentified ☐	Past Due ☐																																																																

DART AEROSPACE LTD		Work Order: 163361
Description: Saddle		Part Number: D3500-1
Inspection Dwg: D3500	Rev: C	Page 1 of 1

FIRST ARTICLE INSPECTION DIMENSION SHEET

				Record Actual Dimensions				
Dim	Min	Max	Go/No Go Gauge	1	2	3	4	5
A	0.483	0.490	.484	.484	.484	.484	.484	.484
B	1.175	1.185		1.178	1.180	1.179	1.179	1.178
C	3.145	3.155		3.148	3.148	3.150	3.148	3.148
D	1.175	1.185		1.178	1.179	1.178	1.179	1.177
E	0.365	0.385		.375	.375	.375	.375	.375
F	0.490	0.510		.501	.500	.501	.500	.499
H	R0.515	R0.535		.515	.515	.515	.515	.515
(Note: Dimension I is 0.015" over flange)								
I	R1.575	R1.595		1.581	1.588	1.585	1.581	1.585
J	0.240	0.260		.255	.251	.251	.259	.251
K	0.490	0.510		.499	.499	.500	.500	.499
L	3.590	3.650		3.620	3.620	3.620	3.620	3.620
M	0.315	0.322	.316	.316	.316	.316	.316	.316
N	0.256	0.262	.257	.257	.257	.257	.257	.257
O	6.500	6.520		6.509	6.510	6.510	6.510	6.510
P	5.990	6.010		6.001	6.000	6.000	5.999	6.001
Q	2.820	2.830		2.823	2.823	2.823	2.823	2.823
R	2.495	2.505		2.499	2.499	2.499	2.499	2.499
S	2.245	2.255		2.248	2.248	2.248	2.248	2.248
T	1.120	1.130		1.125	1.125	1.125	1.125	1.125
U	0.540	0.560		.548	.548	.549	.549	.547
V	0.793	0.803		.797	.797	.797	.797	.797
W	R.240	R.260		.250	.250	.250	.250	.250
X	0.040	0.060		.053	.051	.051	.051	.050
Y	0.100	0.120		.107	.108	.109	.109	.110
AA	R1.125	R1.145		1.128	1.134	1.130	1.131	1.130
AB	R.490	R.510		.500	.500	.500	.500	.500
AC	0.615	0.635		.625	.625	.625	.625	.625
AD	0.240	0.260		.259	.259	.251	.253	.253
AE	1.810	1.830		1.823	1.827	1.820	1.819	1.815
AF	0.240	0.260		.250	.252	.248	.249	.249
AG	0.140	0.160		.152	.152	.149	.149	.149
AH	0.140	0.160		.157	.153	.155	.159	.154
AI	0.140	0.160		.160	.152	.153	.155	.150
Accept/Reject				A	A	A	A	A

Measured by: S.C. [Signature]	Date: 17/07/22
Audited by: [Signature]	Date: 2017-8-2
Preliminary Approval: [Signature]	Date:

Rev	Date	Change	Revised by	Approved
A	06.09.26	New Issue	KJ/EC	
B	08.10.07	Dimension H removed	KJ/DD	
C	08.11.28	Dimension 'M' revised	KJ/EC	
D	11.01.17	Note added to Dim I	KJ	
E	15.02.26	Dimension H added	KJ	

DART AEROSPACE LTD		Work Order: 163361
Description: Saddle		Part Number: D3500-1
Inspection Dwg: D3500 Rev: C DSK: Rev:		Page 1 of 1

FIRST ARTICLE INSPECTION DIMENSION SHEET

				Record Actual Dimensions				
Dim	Min	Max	Go/No Go Gauge	6	7	8	9	10
A	0.483	0.490	.484	.484	.484	.484	.484	.484
B	1.175	1.185		1.178	1.178	1.178	1.178	1.178
C	3.145	3.155		3.148	3.148	3.147	3.148	3.147
D	1.175	1.185		1.178	1.178	1.178	1.178	1.178
E	0.365	0.385		.375	.375	.375	.375	.372
F	0.490	0.510		.500	.500	.501	.499	.500
H	R0.515	R0.535		.515	.515	.515	.515	.515
(Note: Dimension I is 0.015" over flange)								
I	R1.575	R1.595		1.587	1.583	1.584	1.584	1.584
J	0.240	0.260		.253	.252	.252	.252	.252
K	0.490	0.510		.499	.500	.500	.500	.500
L	3.590	3.650		3.620	3.620	3.620	3.620	3.620
M	0.315	0.322	.312	.312	.312	.312	.312	.312
N	0.256	0.262	.257	.257	.257	.257	.257	.257
O	6.500	6.520		6.511	6.510	6.511	6.511	6.511
P	5.990	6.010		5.999	5.999	5.999	5.996	5.998
Q	2.820	2.830		2.823	2.823	2.822	2.824	2.823
R	2.495	2.505		2.497	2.497	2.496	2.498	2.497
S	2.245	2.255		2.248	2.248	2.247	2.250	2.248
T	1.120	1.130		1.125	1.125	1.124	1.127	1.125
U	0.540	0.560		.547	.547	.546	.549	.547
V	0.793	0.803		.797	.797	.797	.797	.797
W	R.240	R.260		.250	.250	.250	.250	.250
X	0.040	0.060		.051	.051	.049	.051	.050
Y	0.100	0.120		.111	.110	.109	.110	.109
AA	R1.125	R1.145		1.128	1.129	1.130	1.129	1.130
AB	R.490	R.510		.500	.500	.500	.500	.500
AC	0.615	0.635		.625	.625	.625	.625	.625
AD	0.240	0.260		.256	.256	.254	.254	.254
AE	1.810	1.830		1.818	1.818	1.818	1.818	1.819
AF	0.240	0.260		.248	.248	.248	.249	.249
AG	0.140	0.160		.148	.147	.148	.148	.148
AH	0.140	0.160		.156	.153	.154	.153	.153
AI	0.140	0.160		.157	.153	.153	.152	.153
Accept/Reject				R*	A	A	A	A

Measured by: DAS	Date: 17/07/23
Audited by: 45	Date: 2017-8-2
Preliminary Approval: 9-89	Date:

Rev	Date	Change	Revised by	Approved
A	06.09.26	New Issue	KJ/EC	
B	08.10.07	Dimension H removed	KJ/DD	
C	08.11.28	Dimension 'M' revised	KJ/EC	
D	11.01.17	Note added to Dim I	KJ	
E	15.02.26	Dimension H added	KJ	

* Tooling mark at edge of piece (I, AI)

DART AEROSPACE LTD		Work Order: 163361
Description: Saddle		Part Number: D3500-1
Inspection Dwg: D3500 Rev: C DSK: Rev:		Page 1 of 1

FIRST ARTICLE INSPECTION DIMENSION SHEET

				Record Actual Dimensions				
Dim	Min	Max	Go/No Go Gauge	11	12	13	14	15
A	0.483	0.490	484	.484	.484	.484	.484	.484
B	1.175	1.185		1.178	1.179	1.180	1.179	1.179
C	3.145	3.155		3.148	3.149	3.150	3.148	3.148
D	1.175	1.185		1.178	1.178	1.179	1.179	1.179
E	0.365	0.385		.375	.375	.375	.375	.375
F	0.490	0.510		.500	.500	.500	.500	.500
H	R0.515	R0.535		.515	.515	.515	.515	.515
(Note: Dimension I is 0.015" over flange)								
I	R1.575	R1.595		1.584	1.580	1.580	1.581	1.580
J	0.240	0.260		.256	0.254	0.250	0.256	0.255
K	0.490	0.510		.501	.501	.500	.500	.501
L	3.590	3.650		3.620	3.620	3.620	3.620	3.620
M	0.315	0.322	.316	.316	.316	.316	.316	.316
N	0.256	0.262	.257	.257	.257	.257	.257	.257
O	6.500	6.520		6.510	6.510	6.511	6.510	6.510
P	5.990	6.010		5.999	5.999	5.999	5.999	5.999
Q	2.820	2.830		2.823	2.826	2.826	2.825	2.826
R	2.495	2.505		2.497	2.500	2.500	2.500	2.500
S	2.245	2.255		2.248	2.251	2.251	2.250	2.251
T	1.120	1.130		1.125	1.126	1.126	1.125	1.126
U	0.540	0.560		.547	.548	.548	.547	.548
V	0.793	0.803		.797	.799	.798	.797	.799
W	R.240	R.260		.250	.250	.250	0.250	0.250
X	0.040	0.060		.050	.050	0.050	0.050	0.050
Y	0.100	0.120		.109	.109	.109	0.109	0.109
AA	R1.125	R1.145		1.130	1.130	1.130	1.130	1.130
AB	R.490	R.510		.500	.500	.500	.500	.500
AC	0.615	0.635		.625	.625	.625	.625	.625
AD	0.240	0.260		.255	.256	.255	0.258	0.255
AE	1.810	1.830		1.820	1.820	1.820	1.820	1.820
AF	0.240	0.260		.249	.249	.249	.249	.249
AG	0.140	0.160		.149	.149	.148	.149	.149
AH	0.140	0.160		.153	.154	.154	0.154	0.154
AI	0.140	0.160		.152	.155	.155	0.1565	0.155
Accept/Reject				A	A	A	A	A

Measured by: kt	Date: 17-07-25
Audited by: DAS	Date: 2017-8-2
Preliminary Approval: 45	Date:
9-89	

Rev	Date	Change	Revised by	Approved
A	06.09.26	New Issue	KJ/EC	
B	08.10.07	Dimension H removed	KJ/DD	
C	08.11.28	Dimension 'M' revised	KJ/EC	
D	11.01.17	Note added to Dim I	KJ	
E	15.02.26	Dimension H added	KJ	

DART AEROSPACE LTD				Work Order: 163361	
Description: Saddle				Part Number: D3500-1	
Inspection Dwg: D3500 Rev: C DSK: Rev:				Page 1 of 1	

FIRST ARTICLE INSPECTION DIMENSION SHEET

Dim	Min	Max	Go/No Go Gauge	Record Actual Dimensions				
				16	17	18	19	20
A	0.483	0.490	.484	.484	.484	.484	.484	.484
B	1.175	1.185	1.180	1.180	1.180	1.180	1.180	1.180
C	3.145	3.155	3.150	3.150	3.150	3.150	3.150	3.150
D	1.175	1.185	1.180	1.180	1.180	1.180	1.180	1.180
E	0.365	0.385	.375	.375	.375	.375	.375	.375
F	0.490	0.510	.500	.500	.500	.500	.500	.500
H	R0.515	R0.535	.525	.525	.525	.525	.525	.525
(Note: Dimension I is 0.015" over flange)								
I	R1.575	R1.595	1.585	1.584	1.580	1.581	1.570	1.581
J	0.240	0.260	0.252	0.251	0.255	0.252	0.253	0.252
K	0.490	0.510	.500	.500	.500	.500	.500	.500
L	3.590	3.650	3.620	3.620	3.620	3.620	3.620	3.620
M	0.315	0.322	0.316	0.316	0.316	0.316	0.316	0.316
N	0.256	0.262	0.257	0.257	0.257	0.257	0.257	0.257
O	6.500	6.520	6.510	6.510	6.510	6.510	6.510	6.510
P	5.990	6.010	5.999	5.999	5.999	5.999	5.999	5.999
Q	2.820	2.830	2.825	2.825	2.826	2.826	2.824	2.824
R	2.495	2.505	2.500	2.500	2.500	2.500	2.502	2.500
S	2.245	2.255	2.250	2.250	2.250	2.250	2.250	2.250
T	1.120	1.130	1.125	1.125	1.126	1.125	1.126	1.126
U	0.540	0.560	0.550	0.550	0.550	0.550	0.546	0.548
V	0.793	0.803	0.799	0.799	0.799	0.799	0.796	0.796
W	R.240	R.260	0.250	0.250	0.250	0.250	0.250	0.250
X	0.040	0.060	0.050	0.050	0.050	0.050	0.050	0.050
Y	0.100	0.120	0.109	0.109	0.109	0.109	0.109	0.109
AA	R1.125	R1.145	1.135	1.135	1.135	1.135	1.135	1.135
AB	R.490	R.510	.500	.500	0.500	0.500	0.500	0.500
AC	0.615	0.635	0.625	0.625	0.625	0.625	0.625	0.625
AD	0.240	0.260	0.255	0.255	0.256	0.255	0.259	0.256
AE	1.810	1.830	1.820	1.820	1.820	1.820	1.820	1.820
AF	0.240	0.260	0.250	0.250	0.250	0.250	0.250	0.250
AG	0.140	0.160	0.150	0.150	0.150	0.152	0.150	0.150
AH	0.140	0.160	0.153	0.153	0.156	0.154	0.152	0.150
AI	0.140	0.160	0.152	0.151	0.152	0.152	0.153	0.152
Accept/Reject				A	n	A	A	A

Measured by: kt			Date: 17-01-26		
Audited by: DAS			Date: 2017-8-2		
Preliminary Approval: 45			Date:		
9.89					
Rev	Date	Change	Revised by	Approved	
A	06.09.26	New Issue	KJ/EC		
B	08.10.07	Dimension H removed	KJ/DD		
C	08.11.28	Dimension 'M' revised	KJ/EC		
D	11.01.17	Note added to Dim I	KJ		
E	15.02.26	Dimension H added	KJ		

DART AEROSPACE LTD		Work Order: 163361
Description: Saddle		Part Number: D3500-1
Inspection Dwg: D3500	Rev: C	Page 1 of 1

FIRST ARTICLE INSPECTION DIMENSION SHEET

				Record Actual Dimensions				
Dim	Min	Max	Go/No Go Gauge	#22	#23	#24	#25	#26
A	0.483	0.490	0.484	0.484	0.484	0.484	0.484	0.484
B	1.175	1.185		1.180	1.180	1.180	1.180	1.180
C	3.145	3.155		3.150	3.150	3.150	3.150	3.150
D	1.175	1.185		1.180	1.180	1.180	1.180	1.180
E	0.365	0.385		0.375	0.375	0.375	0.375	0.375
F	0.490	0.510		0.500	0.500	0.500	0.500	0.500
H	R0.515	R0.535		0.525	0.525	0.525	0.525	0.525
(Note: Dimension I is 0.015" over flange)								
I	R1.575	R1.595		1.5825	1.581	1.583	1.580	1.582
J	0.240	0.260		0.251	0.251	0.251	0.252	0.253
K	0.490	0.510		0.500	0.500	0.500	0.500	0.500
L	3.590	3.650		3.620	3.620	3.620	3.620	3.620
M	0.315	0.322	0.316	0.316	0.316	0.316	0.316	0.316
N	0.256	0.262	0.257	0.257	0.257	0.257	0.257	0.257
O	6.500	6.520		6.510	6.510	6.510	6.510	6.510
P	5.990	6.010		5.999	5.999	5.999	5.999	5.999
Q	2.820	2.830		2.826	2.826	2.826	2.826	2.826
R	2.495	2.505		2.500	2.500	2.500	2.500	2.500
S	2.245	2.255		2.250	2.250	2.250	2.250	2.250
T	1.120	1.130		1.126	1.126	1.126	1.127	1.126
U	0.540	0.560		0.550	0.548	0.548	0.548	0.548
V	0.793	0.803		0.798	0.799	0.799	0.800	0.799
W	R.240	R.260		0.250	0.250	0.250	0.250	0.250
X	0.040	0.060		0.050	0.050	0.050	0.050	0.050
Y	0.100	0.120		0.109	0.109	0.109	0.109	0.109
AA	R1.125	R1.145		1.135	1.135	1.135	1.135	1.135
AB	R.490	R.510		0.500	0.500	0.500	0.500	0.500
AC	0.615	0.635		0.625	0.625	0.625	0.625	0.625
AD	0.240	0.260		0.256	0.256	0.256	0.256	0.256
AE	1.810	1.830		1.821	1.821	1.8195	1.820	1.820
AF	0.240	0.260		0.250	0.250	0.250	0.250	0.250
AG	0.140	0.160		0.150	0.150	0.150	0.148	0.148
AH	0.140	0.160		0.151	0.151	0.152	0.152	0.149
AI	0.140	0.160		0.152	0.150	0.150	0.150	0.150
Accept/Reject				A	A	A	A	

Measured by: Kx J.C.	Date: 17-07-26
Audited by: DAS	Date: 2017-8-2
Preliminary Approval: 45	Date:

Rev	Date	Change	Revised by	Approved
A	06.09.26	New Issue	KJ/EC	
B	08.10.07	Dimension H removed	KJ/DD	
C	08.11.28	Dimension 'M' revised	KJ/EC	
D	11.01.17	Note added to Dim I	KJ	
E	15.02.26	Dimension H added	KJ	

DART AEROSPACE LTD		Work Order: 163361
Description: Saddle		Part Number: D3500-1
Inspection Dwg: D3500 Rev: C DSK: Rev:		Page 1 of 1

FIRST ARTICLE INSPECTION DIMENSION SHEET

				Record Actual Dimensions				
Dim	Min	Max	Go/No Go Gauge	27 ¹	28 ²	29 ³	30 ⁴	31 ⁵
A	0.483	0.490	0.484	.484	.484	.484	.484	.484
B	1.175	1.185		1.180	1.181	1.181	1.180	1.180
C	3.145	3.155		3.150	3.149	3.149	3.150	3.149
D	1.175	1.185		1.180	1.181	1.181	1.180	1.180
E	0.365	0.385		.375	.375	.375	.375	.375
F	0.490	0.510		.500	.500	.501	.501	.501
H	R0.515	R0.535		.525	.525	.525	.525	.525
(Note: Dimension I is 0.015" over flange)								
I	R1.575	R1.595		1.582	1.584	1.585	1.586	1.585
J	0.240	0.260		.252	.255	.254	.252	.252
K	0.490	0.510		.500	.500	.500	.501	.501
L	3.590	3.650		3.620	3.620	3.620	3.620	3.620
M	0.315	0.322	.316	.316	.316	.316	.316	.316
N	0.256	0.262	.257	.257	.257	.257	.257	.257
O	6.500	6.520		6.510	6.510	6.510	6.510	6.510
P	5.990	6.010		5.999	5.999	5.999	5.999	5.999
Q	2.820	2.830		2.826	2.826	2.826	2.826	2.826
R	2.495	2.505		2.501	2.501	2.501	2.501	2.500
S	2.245	2.255		2.250	2.250	2.250	2.250	2.250
T	1.120	1.130		1.127	1.127	1.126	1.126	1.125
U	0.540	0.560		.549	.549	.548	.547	.545
V	0.793	0.803		.796	.796	.797	.797	.798
W	R.240	R.260		.250	.250	.250	.250	.250
X	0.040	0.060		.050	.050	.050	.050	.050
Y	0.100	0.120		.109	.110	.110	.110	.110
AA	R1.125	R1.145		1.128	1.130	1.130	1.132	1.130
AB	R.490	R.510		.500	.500	.500	.500	.500
AC	0.615	0.635		.625	.625	.625	.625	.625
AD	0.240	0.260		.256	.255	.254	.253	.255
AE	1.810	1.830		1.819	1.820	1.820	1.820	1.821
AF	0.240	0.260		.249	.250	.250	.249	.249
AG	0.140	0.160		.148	.149	.150	.149	.148
AH	0.140	0.160		.149	.149	.151	.149	.147
AI	0.140	0.160		.149	.149	.148	.149	.150
Accept/Reject				A	A	A	A	X

Measured by: S. DAS	Date: 17/07/27
Audited by: 45	Date: 2017-8-2
Preliminary Approval: 9-89	Date:

Rev	Date	Change	Revised by	Approved
A	06.09.26	New Issue	KJ/EC	
B	08.10.07	Dimension H removed	KJ/DD	
C	08.11.28	Dimension 'M' revised	KJ/EC	
D	11.01.17	Note added to Dim I	KJ	
E	15.02.26	Dimension H added	KJ	

DART AEROSPACE LTD		Work Order: 163361
Description: Saddle		Part Number: D3500-1
Inspection Dwg: D3500	Rev: C	Page 1 of 1

FIRST ARTICLE INSPECTION DIMENSION SHEET

Dim	Min	Max	Go/No Go Gauge	Record Actual Dimensions				
				32*	33*	34*	35*	36*
A	0.483	0.490	-484	.484	.484	.484	.484	.484
B	1.175	1.185		1.180	1.180	1.179	1.180	1.180
C	3.145	3.155		3.149	3.150	3.149	3.150	3.149
D	1.175	1.185		1.180	1.180	1.180	1.180	1.180
E	0.365	0.385		.375	.375	.375	.375	.375
F	0.490	0.510		.501	.501	.501	.502	.500
H	R0.515	R0.535		.525	.525	.525	.525	.525
(Note: Dimension I is 0.015" over flange)								
I	R1.575	R1.595		1.584	1.584	1.584	1.584	1.583
J	0.240	0.260		.253	.252	.251	.253	.253
K	0.490	0.510		.500	.501	.501	.501	.500
L	3.590	3.650		3.620	3.620	3.620	3.620	3.620
M	0.315	0.322	.316	.316	.316	.316	.316	.316
N	0.256	0.262	.257	.257	.257	.257	.257	.257
O	6.500	6.520		6.510	6.510	6.510	6.510	6.510
P	5.990	6.010		5.999	5.999	5.999	5.999	5.999
Q	2.820	2.830		2.826	2.826	2.826	2.826	2.826
R	2.495	2.505		2.500	2.500	2.500	2.500	2.500
S	2.245	2.255		2.250	2.250	2.250	2.250	2.250
T	1.120	1.130		1.126	1.126	1.126	1.126	1.126
U	0.540	0.560		.548	.547	.548	.549	.547
V	0.793	0.803		.797	.797	.797	.797	.797
W	R.240	R.260		.250	.250	.250	.250	.250
X	0.040	0.060		.050	.050	.050	.050	.050
Y	0.100	0.120		.110	.110	.110	.108	.110
AA	R1.125	R1.145		1.130	1.130	1.129	1.130	1.129
AB	R.490	R.510		.500	.500	.500	.500	.500
AC	0.615	0.635		.625	.625	.625	.625	.625
AD	0.240	0.260		.254	.254	.256	.255	.255
AE	1.810	1.830		1.820	1.820	1.820	1.819	1.820
AF	0.240	0.260		.249	.249	.249	.249	.249
AG	0.140	0.160		.148	.149	.148	.149	.148
AH	0.140	0.160		.151	.151	.149	.150	.149
AI	0.140	0.160		.151	.149	.149	.149	.148
Accept/Reject				A	A	A	A	A

Measured by: SC	Date: 17/07/12
Audited by: DAS	Date: 20/7/12
Preliminary Approval: 45	Date:
9.89	

Rev	Date	Change	Revised by	Approved
A	06.09.26	New Issue	KJ/EC	
B	08.10.07	Dimension H removed	KJ/DD	
C	08.11.28	Dimension 'M' revised	KJ/EC	
D	11.01.17	Note added to Dim I	KJ	
E	15.02.26	Dimension H added	KJ	

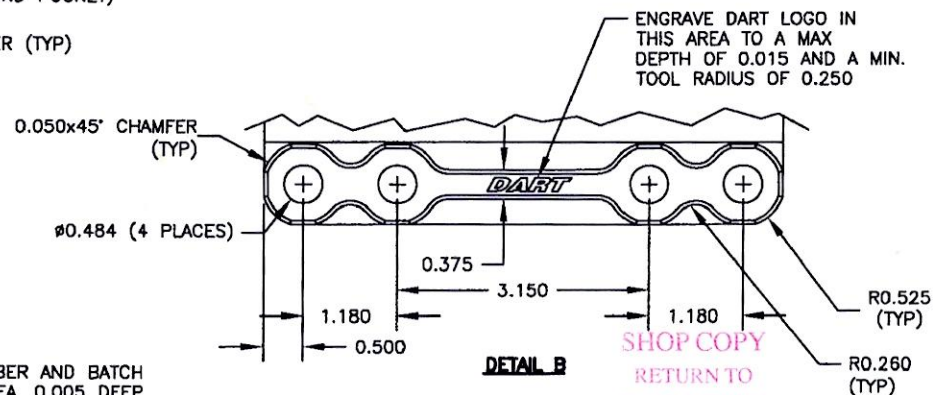
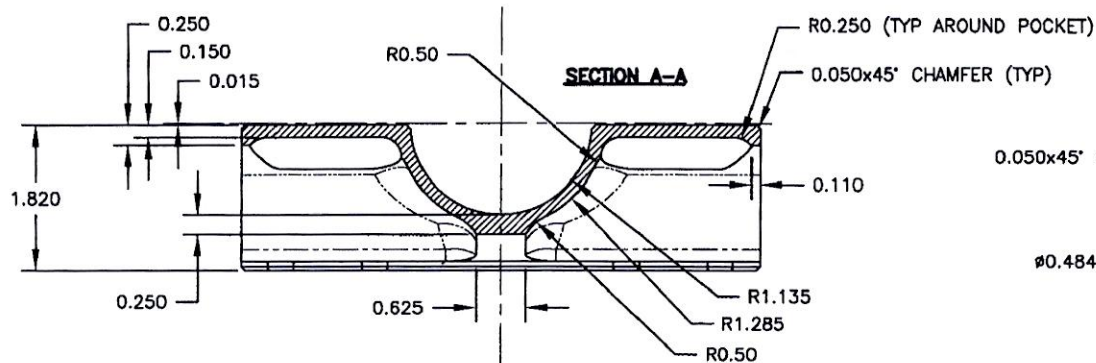
DART AEROSPACE LTD		Work Order: 163361
Description: Saddle		Part Number: D3500-1
Inspection Dwg: D3500 Rev: C DSK: Rev:		Page 1 of 1

FIRST ARTICLE INSPECTION DIMENSION SHEET

Dim	Min	Max	Go/No Go Gauge	Record Actual Dimensions				
				37 #	38 #	39 #	40 #	41 #
A	0.483	0.490	.484	.484	.484	.484	.484	.484
B	1.175	1.185		1.180	1.180	1.180	1.180	1.180
C	3.145	3.155		3.149	3.149	3.149	3.149	3.149
D	1.175	1.185		1.180	1.180	1.180	1.180	1.180
E	0.365	0.385		.375	.375	.375	.375	.375
F	0.490	0.510		.501	.501	.500	.501	.501
H	R0.515	R0.535		.526	.525	.525	.525	.525
(Note: Dimension I is 0.015" over flange)								
I	R1.575	R1.595		1.588	1.583	1.584	1.584	1.584
J	0.240	0.260		.253	.259	.253	.257	.251
K	0.490	0.510		.500	.500	.500	.500	.500
L	3.590	3.650		3.620	3.620	3.620	3.620	3.620
M	0.315	0.322	.316	.316	.316	.316	.316	.316
N	0.256	0.262	.257	.257	.257	.257	.257	.257
O	6.500	6.520		6.510	6.510	6.510	6.510	6.510
P	5.990	6.010		5.999	5.999	5.999	5.999	5.999
Q	2.820	2.830		2.826	2.826	2.826	2.826	2.826
R	2.495	2.505		2.500	2.500	2.500	2.500	2.500
S	2.245	2.255		2.250	2.250	2.250	2.250	2.250
T	1.120	1.130		1.126	1.126	1.126	1.126	1.126
U	0.540	0.560		.547	.547	.547	.545	.545
V	0.793	0.803		.797	.797	.797	.797	.797
W	R.240	R.260		.250	.250	.250	.250	.250
X	0.040	0.060		.050	.050	.050	.050	.050
Y	0.100	0.120		.110	.110	.110	.110	.110
AA	R1.125	R1.145		1.133	1.129	1.130	1.130	1.130
AB	R.490	R.510		.500	.500	.500	.500	.500
AC	0.615	0.635		.625	.625	.625	.625	.625
AD	0.240	0.260		.253	.255	.255	.255	.255
AE	1.810	1.830		1.821	1.820	1.820	1.820	1.821
AF	0.240	0.260		.250	.247	.249	.248	.248
AG	0.140	0.160		.151	.147	.150	.149	.148
AH	0.140	0.160		.148	.148	.149	.150	.150
AI	0.140	0.160		.149	.148	.148	.148	.148
Accept/Reject				A	A	A	A	A

Measured by: SC.	Date: 17/07/28
Audited by: DAS	Date: 2017-8-2
Preliminary Approval: 45	Date:
9-89	

Rev	Date	Change	Revised by	Approved
A	06.09.26	New Issue	KJ/EC	
B	08.10.07	Dimension H removed	KJ/DD	
C	08.11.28	Dimension 'M' revised	KJ/EC	
D	11.01.17	Note added to Dim I	KJ	
E	15.02.26	Dimension H added	KJ	



DETAIL B

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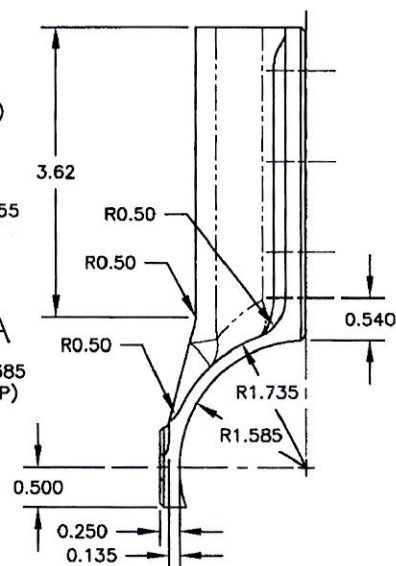
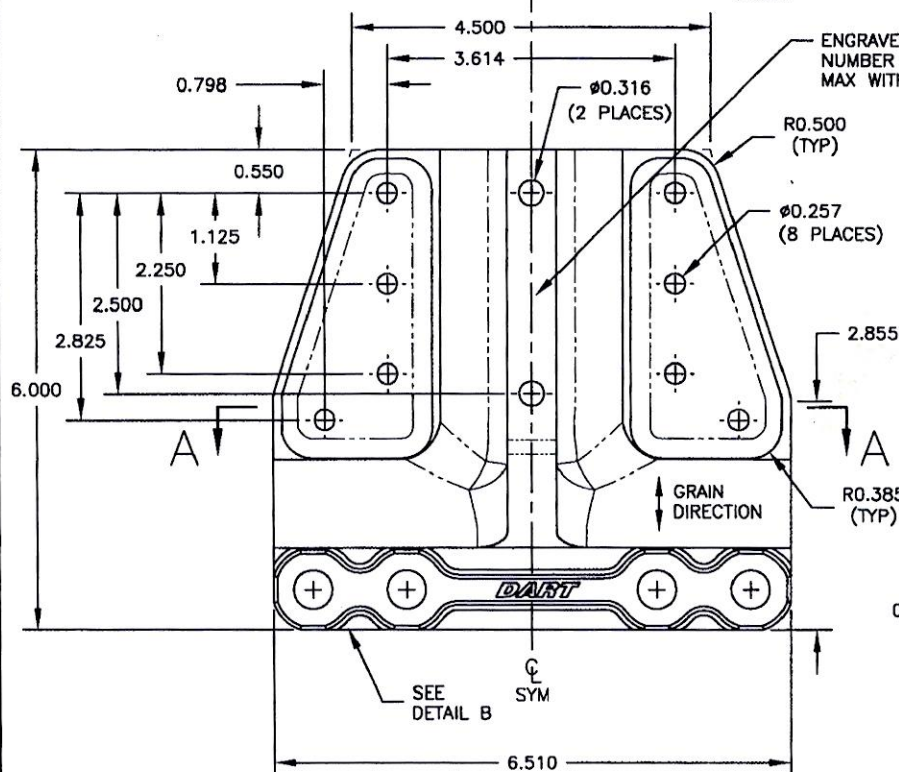
WORK ORDER
NO. 163361 ML5
1706-27

D3500-1 SADDLE

- 1) MATERIAL: 6061-T6/T651 (QQ-A-200/8 OR QQ-A-250/11)
(MAKE FROM D6102-013 SADDLE BILLET, 6061)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1,
POWDER COAT GLOSS WHITE (REF 4.3.5.1) PER
DART QSI 005 4.3
- 3) BREAK ALL SHARP EDGES 0.010 TO 0.020
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES

RELEASED

06.08.15 #



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DART AEROSPACE LTD.

C	06.06.30	MAT'L NOW 6061-T6/T651
B	06.05.29	CHANGE DIMS; MAT'L NOW 7075-T7351
A	06.04.18	NEW ISSUE
DESIGN	PH	DART DART AEROSPACE LTD. HARRISBURG, ONTARIO, CANADA
CHECKED	PH	DRAWING NO. D3500
DATE	06.06.30	TITLE SADDLE
REV. C		SHEET 1 OF 1
SCALE		2:3